

ABSTRACT OF THE DISCLOSURE

A network protocol translation device that allows serial data sent using the standard Asynchronous Transfer Mode (ATM) protocol to be used between two locations, using a satellite link or a terrestrial wireless link between the two locations.

5 This is done by translating the standard ATM data to a standard satellite modem interface at one location, and translating the data back to the ATM format at the second (remote) location. The translation can occur at any data rate up to the available effective bandwidth of the ATM connection. The device is also capable of providing Forward Error Correction in the protocol translation. The device is functionally
10 transparent to protocols above ATM, i.e., IP, UDP and TCP. It also interfaces with standard physical layers below ATM such as Synchronous Optical Network (SONET). At the satellite interface, the device is compatible with (but not limited to) Emitter Coupled Logic (ECL).